

VII. PHYSICAL PLANT INVENTORY

ROAD AND PARKING SYSTEM

Background information

In March of 1990, the Institute for Transportation Research and Education (ITRE) conducted a road inventory at Lake Waccamaw State Park. Since that time, a park visitor's center has been constructed with a paved parking lot and changes to the road system. The revised figures for the road and parking system are:

Paved road miles - 2.0 miles;
Unpaved road miles - 1.22;
Paved parking lots – 3,862 square yards; and
Unpaved parking lot – 1,000 square yards.

The unpaved parking lot is located at the Waccamaw River access.

Description

The road system is comprised of a main park road that is approximately two miles in length. A feeder road off the main road connects to the visitor's center. The entrance road ends at the picnic area/maintenance area/group camp area. The entrance road is 20 feet wide with five-foot shoulders. The entrance road was realigned in 1999 to allow placement of the visitor's center on the right side of the road upon entering the park. The road that goes from the picnic area to the maintenance compound is a single-lane, dirt road with some gravel screenings. Pavement has an eight-inch stone base with two-inch asphalt depths. The main road, which was constructed in the mid1980s, was paved in 1991.

There are three major parking areas within the park. The picnic area has 40 spaces including two handicapped spaces. The visitor's center parking lot has 25 visitor spaces and five staff spaces, three handicapped spaces, and two bus parking spaces. The Waccamaw River Access has 25 spaces for fisherman and hikers to park.

Drainage is handled through concrete pipes that are located at low points along the roadways and parking lots. Most pipe culverts are concrete. There are four concrete catch basins located in the park. Since the soil is of a sandy texture, most run off is absorbed in the ground.

Current Conditions

The road and parking lots were constructed in the early 1980s on lands acquired from Federal Paper Company. The road was gravel for several years before it was paved in 1991. Culverts are in good condition. The main road is in fair to good shape. An excellent cover of centipede grass exists on the road shoulders.

Road Repair Needs and Costs

The main road has approximately 200 square yards of pavement that needs patching. Some edge patching is also needed. There is a minor drainage problem in the road ditches around the new visitor's center that needs some minor grading. The day-use parking area needs striping. The parking area at the Waccamaw River Access needs some gravel and additional grading.

Patching, grading for the drainage problems, and parking lot striping costs total approximately \$4000. The present N.C. Department of Transportation maintenance funds can be used to fund these repair needs.

SEWER SYSTEM

Description

Each building that discharges sewer has its own separate sewer system, septic tank and nitrification drain lines. There currently are two sewer systems in operation. The sewer systems are as follows:

Picnic Sewer System – Two 750-gallon septic tanks lie in a series with a distribution box. The drain field has four 100-foot lines. The system was installed in 1990.

Visitor Center Sewer System - A 2500-gallon septic tank has a conventional distribution box. The drain field consists of six 100-foot drain lines. The system was installed in 1999.

Current Conditions

Overall, the sewer systems are in good shape. The picnic area sewer has never been pumped out and is in need of pumping. The visitor's center septic tank also needs pumping. The drain fields are in good shape.

Sewer Repair Needs and Costs

The septic tanks at the picnic area need a riser installed on both septic tanks and a filter installed in the last septic tank. The visitor's center system needs to be checked to see if it needs pumping, and a filter needs to be put on this tank. The risers were supposed to be manhole ring and covers, but a heavy steel lid was installed instead. The steel lids need to be replaced with manhole rings and covers, and a filter also needs to be installed.

Pumping of septic tanks for both facilities will cost \$1,000. Installation of risers for three tanks will cost \$1500.

WATER SYSTEM

Description

The park has two wells that supply drinking water to the park. Well number one is located between the picnic toilet building and the maintenance area. This well serves the picnic area, group camp and maintenance area with water. The well yield is unknown, but it is estimated to yield over one hundred gallons-per-minute. It has two 500-gallon pressure storage tanks that are located beside the well house. The well house is equipped with a chlorinator, and the water is pumped with a submersible pump of unknown size. It was installed in the mid 1980s.

Well number two is located at the visitor's center and was drilled in 1999. The well yield is unknown, but it is supposed to have a high yield also. The well house has a chlorinator and a water softener.

The distribution system has various sizes of pvc piping. All piping appears to be two inches or smaller in diameter.

Current Conditions

The wells and water distribution system are in good shape. The pumps and chlorinators are in fair shape and will need monitoring for replacement as needed.

Water System Repair Needs

Park staff has requested that consideration be given to connecting to the Town of Lake Waccamaw's water system for the visitor center. With construction of the residence, a tee will be placed at the house to facilitate hookup of the rest of the park in the future. In the meantime, the Superintendent will have the park wells tested to see if there are any problems. At this time no repair needs are recommended.

ELECTRICAL SYSTEM

The park power is all run underground and is supplied by Progress Energy Corporation. Pad-mounted transformers are located at all major buildings. The system was installed in the 1980s and is in good shape. No repairs are needed.

TELEPHONE SYSTEM

Bell South provides phone service. The park visitor's center has adequate phone service. There is one pay phone, located in the picnic area. The maintenance shop has a separate phone line. The phone system is in good condition, and no repairs are needed.

FACILITY INVENTORY AND INSPECTION PROGRAM

Buildings and other structures in state parks are necessary to provide services to park visitors. These structures are essential for protecting public safety, health, and welfare while providing opportunities for outdoor recreation. They include infrastructure, such as roads, parking lots, trails, and systems for potable water, electrical distribution, and sewage treatment. They also include operational and recreational facilities, such as campgrounds, picnic areas, concession buildings, boardwalks, park offices, residences, pump houses, warehouses, barracks, maintenance shops, visitor centers, etc. These facilities must be properly maintained to provide for a safe, continuous, and high-quality experience for park visitors.

Lake Waccamaw State Park Building Inventory

Pictures and descriptions of the buildings and other structures currently in use at Lake Waccamaw State Park and their repair needs follow:



Visitor's Center/Park Office: Building # 033011. Built in 1998. The one story wood-frame structure has 5,940 heated square feet and a cathedral ceiling. It contains administrative offices, an auditorium, exhibit hall, classroom and public restrooms. It is in excellent condition.



Toilet Building: Building # 033008. Built in 1990. The wood-frame, 540 square foot structure has a shingle roof and board and batten siding, with a one-person office and storage in the center. Located in the picnic area. It is in excellent condition.



Maintenance Office: Building # 033009. Built in 1991. The 288 square foot wood-frame structure has a 100 square foot addition built in 2004. An open lumber storage shed is attached. It is in good condition.



Maintenance Shop and Shed: Building # 033010. Built in 1991. The 616 square foot wood-frame structure is used as a maintenance shop. It is in good condition.



Pump House: Building # 033007. Built in 1990. The 81 square foot unheated wood-frame building is used as a pump house. It is in good condition.



Handicapped Pit Toilet: Building # 033002. Built in 1976. The 21 square foot unheated wood-frame primitive toilet was later renovated to be handicap accessible and now has 56 square feet. It is in fair condition.

Pit Toilet: (no photo) Building # 033005. Built in 1976. The 21 square foot unheated wood-frame primitive toilet is in fair condition.

Pit Toilet: (no photo) Building # 033006. Built in 1976. The 21 square foot unheated wood-frame primitive toilet is in fair condition.



Dam: Repairs are needed and design is underway.



HC Accessible Boardwalk & Shelters Near VC: Built in 1999, the 8' x 1,100' boardwalk has two 24' x 24' Sun Shelters. Project cost was \$98,750.



Picnic Area Boardwalk: Renovated in 2001, the 8' x 700' boardwalk leads to a 24' x 24' Overlook Shelter (next photo), an 8' x 375' Pier, and two 32' x 50' patios (photo on following page). Renovation cost was \$43,150.



Overlook Shelter: Located at the end of the picnic area boardwalk and start of pier.



Pier: View from the overlook shelter showing the piers on the picnic area pier.



Aluminum Equipment Storage Shed: Located in the maintenance area and used as a temporary storage shed.

MAJOR CAPITAL IMPROVEMENT PROJECT PRIORITIES

As a part of the general management plan process, proposed capital improvement projects at Lake Waccamaw State Park were carefully reviewed to determine if all projects were still needed and if changes to projects were desirable. In reviewing the proposed capital improvement projects, the general management plan evaluation team considered factors such as changes in environmental regulations, condition of facilities, natural heritage inventory, recreation demand, operational issues and needs, visitor safety considerations, State Parks Act mandates, and trends.

As a result of the general management plan review of the capital improvement projects, several project scopes were revised. Revisions include deletion of some work that had been accomplished by park staff, recombination of some projects to link related work elements, and the addition of new capital improvement needs that were identified.

Each project was then evaluated and ranked using the Division's Project Evaluation Program (PEP), thus creating a revised project priority list of capital improvement projects for Lake Waccamaw State Park, which is shown below. These projects were then combined with projects evaluated and ranked for other state park units, resulting in a priority list of capital improvement projects for the entire state parks system. A revised capital improvement priority list for Lake Waccamaw, descriptions of the capital improvement projects, and revised site plans showing location of the proposed development follow.

Revised Capital Improvement Priorities

Rank	Project Title	*Score	Cost
1	TENT/TRAILER CAMPGROUND DEVELOPMENT	653	\$1,555,447
2	VISITOR'S CENTER DAY USE AREA DEVELOPMENT	619	392,339
3	RIVER ACCESS & TRAIL IMPROVEMENTS	615	829,188
4	MAINTENANCE AREA DEVELOPMENT	571	1,006,109
5	GROUP CAMP DEVELOPMENT	566	455,285
6	SOUTH DAY USE AREA DEVELOPMENT (Land Dependent)	565	1,390,282
7	BIG CREEK MULTIUSE AREA IMPROVEMENTS (Land Dependent)	427	<u>256,964</u>
TOTAL:			\$5,885,614

** The score comes from the Division's Project Evaluation Program (PEP). The PEP uses an evaluation formula to rank projects that considers four factors: the objective of the project; the justification or urgency for funding; the estimated annual number of persons (visitors and/or employees) who are affected by the project; and the project's significance, ranging from local to national. The park superintendent, district superintendent, and division management evaluate projects. There are 15 objectives categorizing a project's purpose, and each project can have a primary and secondary objective.*

Capital Improvement Project Descriptions

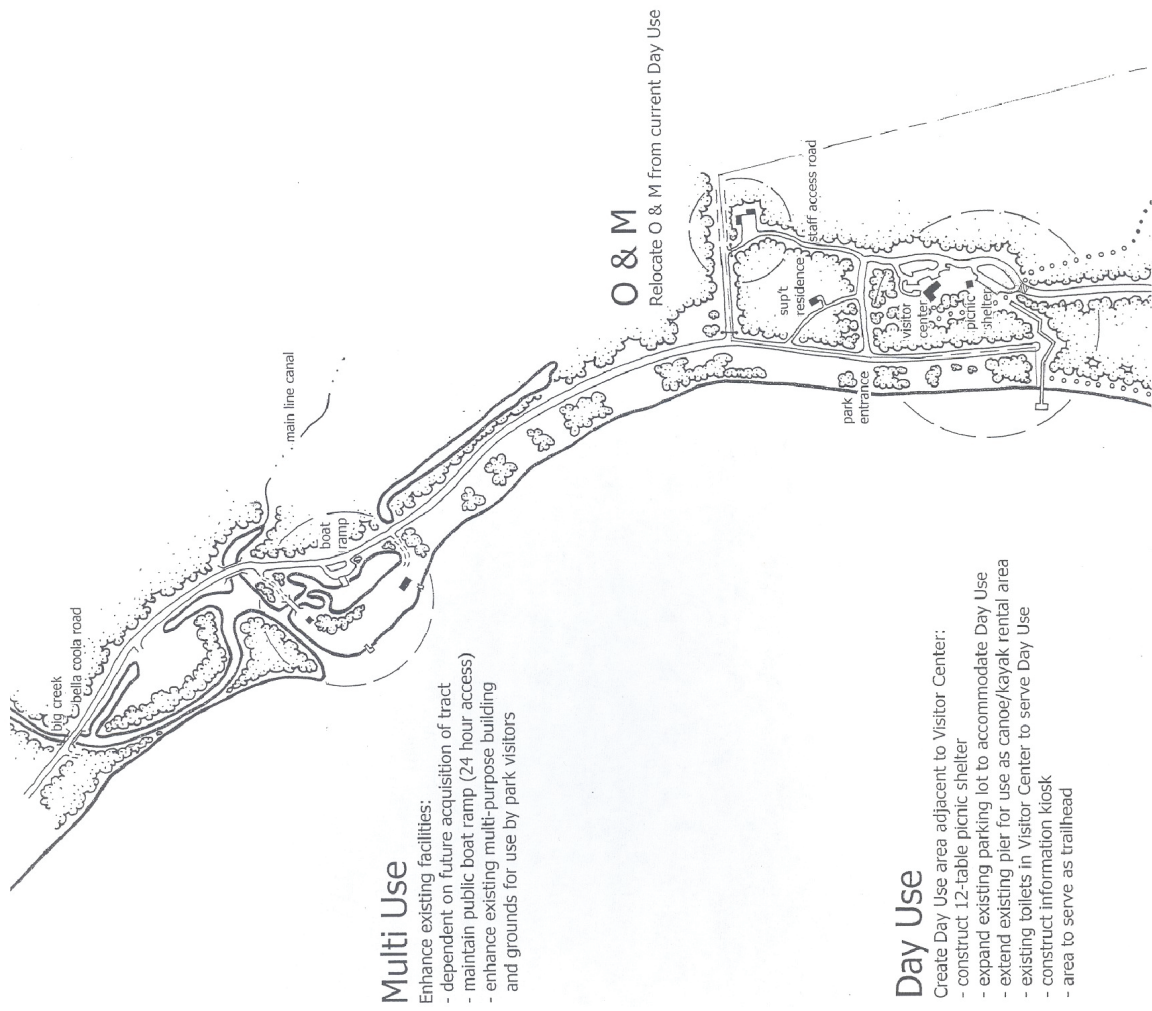
1. Tent/Trailer Campground Development: This project includes an access path to the lake; a 650-foot long pier/handicapped walkway with three sheltered bench sitting areas; a dump station; a camping loop with 30 campsites with electrical hookups; an amphitheatre; septic tanks and septic fields; a shower house with solar power assistance; and tables, grills, lantern holders, and fire rings for 30 campsites. A ranger residence, the second in the park, will also be constructed as a part of this project. If an existing residence is acquired with land acquisition, construction of the residence will be deleted from the project scope.
2. Visitor's Center Day Use Area Development: This proposed development adjacent to the park visitor's center includes a 20-car paved parking lot expansion, an information kiosk, a 200-foot long pier with sheltered benches, a canoe rental area with a storage shed, a 12-table picnic shelter, kayaks and canoes, and picnic tables.
3. River Access and Trail Improvements: This project includes trail signage, improvements to three miles of trail, three primitive campsites with a pit toilet, canoe portage with a handicapped-accessible dock, split rail fencing and vegetative buffer, a pump station, an entrance sign, a boardwalk with a platform and a boat dock to connect the trail across the Waccamaw River. It also includes

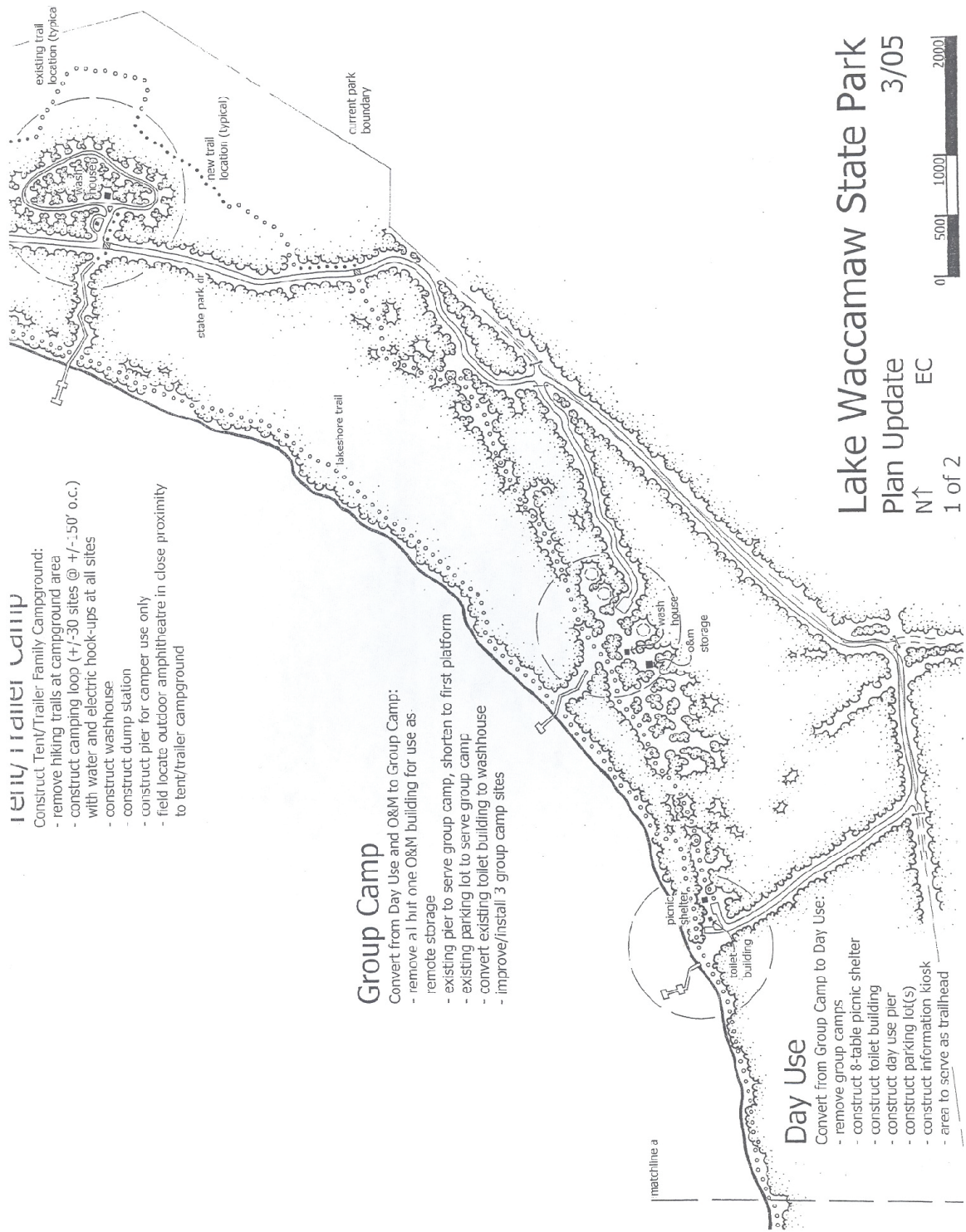
a flush toilet building with solar power assistance, a handicapped parking space, an information kiosk, a force main extension to the town sewer, and four picnic tables.

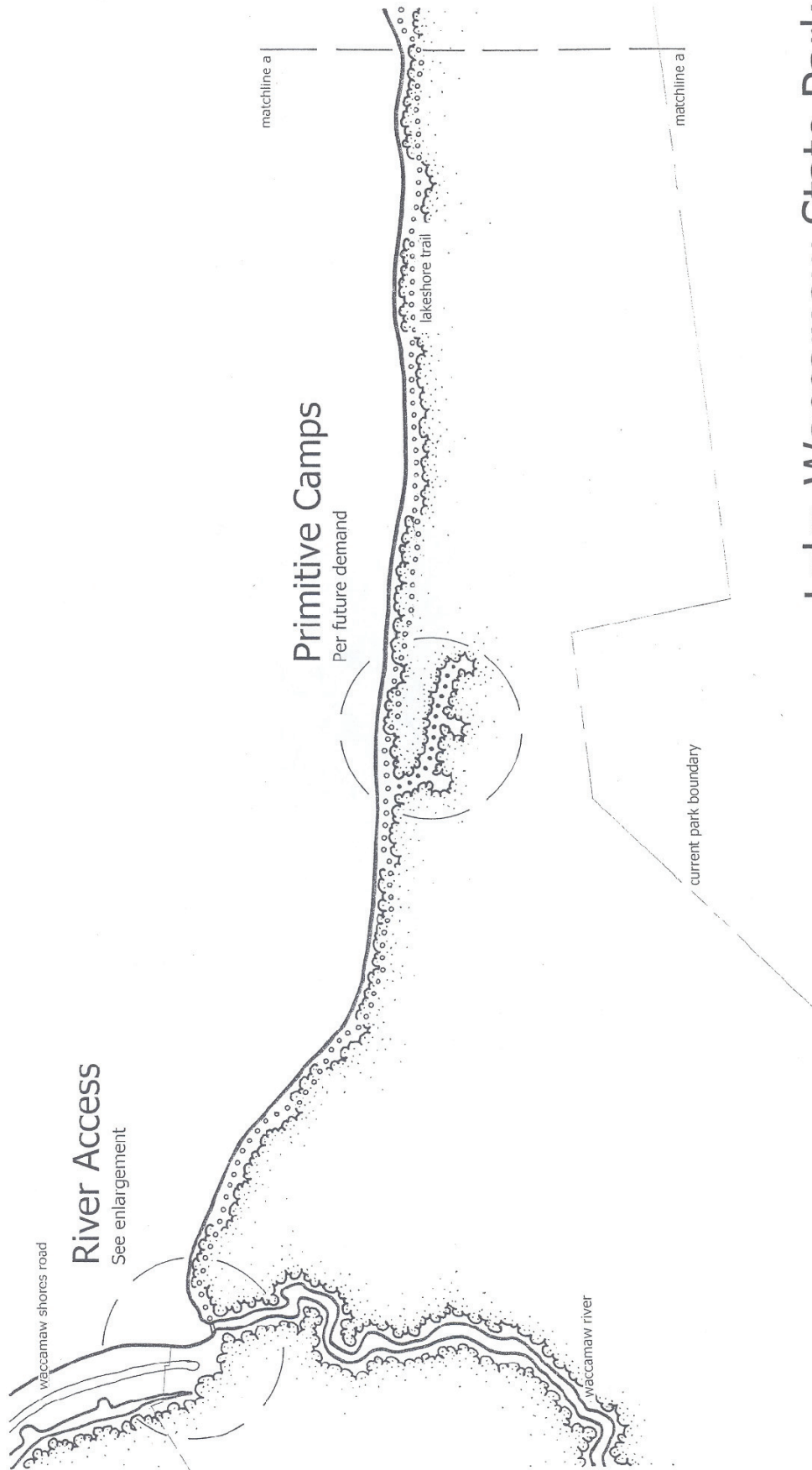
4. Maintenance Area Development: This project includes any final demolition and/or relocation of the existing maintenance facilities if any remain at time of the project's beginning. It also includes security fencing, paved or graveled work and storage areas, a wash pad, a septic system, a flammable-storage building, miscellaneous maintenance equipment, a standard warehouse with a concrete floor, a six-bay vehicle and boat storage building, a 3,000 square foot maintenance building, and a vehicle lift. Buildings are to have solar power assistance. The maintenance area will be relocated from the current day use area in order to eliminate conflict of use.
5. Group Camp Development: The project includes removal of the 130 feet of the existing pier located beyond the first platform; demolition of any remaining existing maintenance facilities located in the group camp area (including the above ground gas tank); clearing and grading for three 100-foot group camp areas; improvements to the existing boardwalk/pier; expansion of the existing toilet building including adding two showers per side and solar power assistance; and grills, fire rings, lantern holders, and tables at the three campsites.
6. South Day Use Area Development: This project is dependent upon future land acquisition. The project scope includes removal of the existing group camps, installation of a 7,000-foot access road, a toilet building with solar power assistance, an eight-table picnic shelter, an information kiosk, and grills and picnic tables.
7. Big Creek Multiuse Area Improvements: This project is currently dependent upon future land acquisition. Development includes improvements to the boat ramp, a new dock, and a new boat lift. It also includes improvements to the existing multi-use building and an information kiosk. The final project scope of this project will be developed when and if land acquisition becomes imminent.

REVISED SITE PLANS

Revised site plans for Lake Waccamaw State Park are shown on the following four pages.







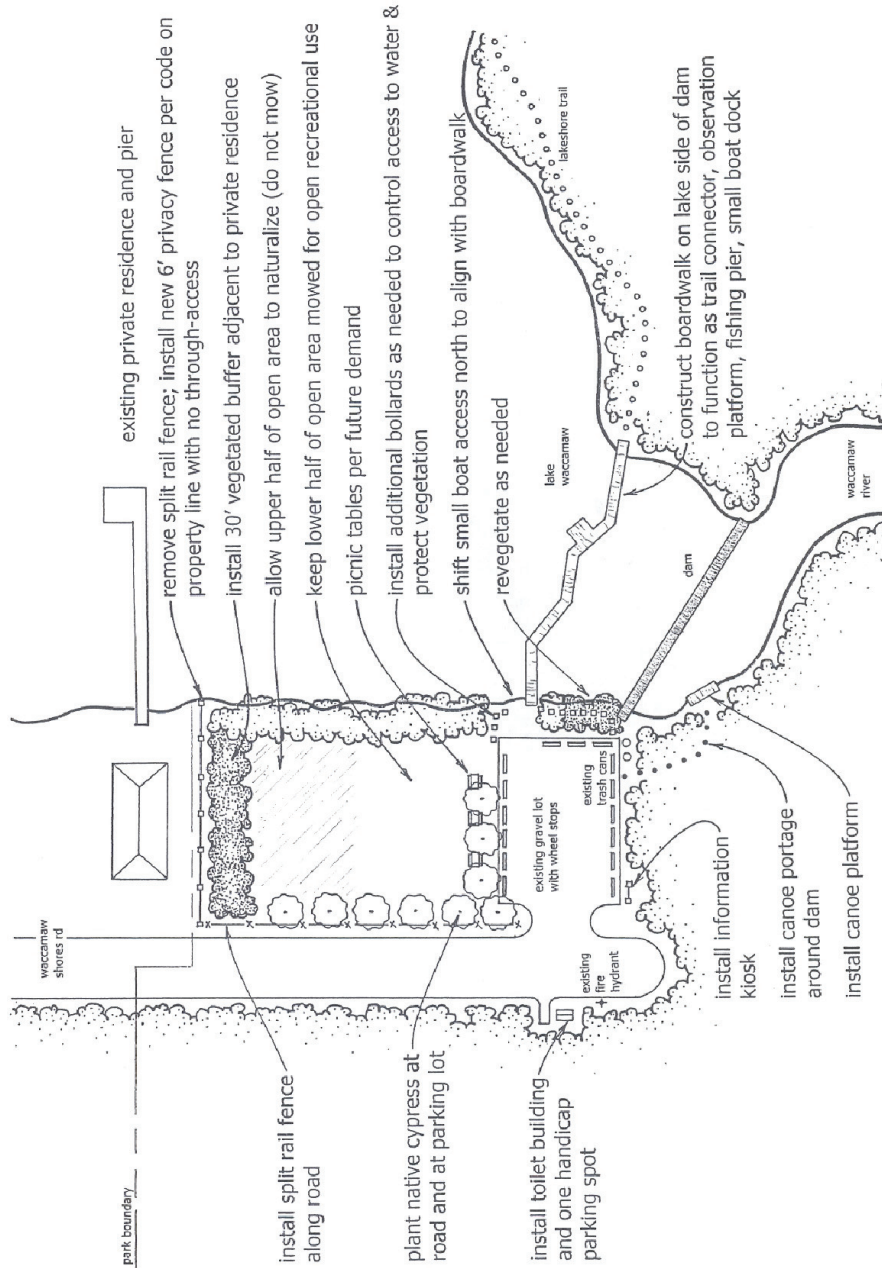
Lake Waccamaw State Park Plan Update

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Lake Waccamaw State Park

Plan Update

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River Access

3/05

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